



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/668,525      | 09/23/2003  | Dominique Baulier    | VMS-19002/04        | 1873             |

25006 7590 01/25/2006

GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C  
PO BOX 7021  
TROY, MI 48007-7021

|          |
|----------|
| EXAMINER |
|----------|

JIMENEZ, MARC QUEMUEL

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3726

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/668,525

Applicant(s)

BAULIER, DOMINIQUE

Examiner

Marc Jimenez

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 6-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/6/04, 1/2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, Claims 1-16 in the reply filed on 11/10/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 17-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claims 1-16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "its associated framing clamp" in line 17 which lacks proper antecedent basis. It is also unclear which element in the apparatus has a framing clamp.

Claim 1 recites "the at least one reference surface" in line 19 which lacks proper antecedent basis. It is also unclear what element in the apparatus has the "at least one reference surface".

Art Unit: 3726

Claim 4 recites “the welding robots” in line 1 and “their welding guns” in line 3 which lack proper antecedent basis.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-5, 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over McNamara et al. (US6364817) in view of Hirano et al. (US4679297) and Crorey et al. (US5632588).

McNamara et al. teach an assembly station having spaced apart frame members (below 46 in figure 2), a vehicle carrier **28** which supports the vehicle body components in a preassembled condition at the assembly station, at least two docking stations **46** secured to each frame member at predetermined positions, a tool arm **54** associated with each docking station **46**, a mechanism **86** associated with each tool arm **54** for moving the tool arm **54** between an assembly position in which each tool arm **54** abuts against its associated docking station (below **46**) at a predetermined position, and a vehicle loading position in which each tool arm **54** is disengaged from its associated docking station (below **46**), a tool arm holder **46** associated with each docking station which holds the tool arm **54** to its associated docking station at the predetermined position when the tool arm is in the assembly position, at least one reference

Art Unit: 3726

block (Note that the tool arm **54** shown in figure clamps the vehicle **12** in place and therefore has a framing clamp. The tool arm also has tooling as described in col. 2, lines 58-65 which are considered “reference blocks”.) with its associated framing clamp releasably clamping its associated tool arm **54** across the at least one reference block to maintain it in contact with its reference block, on at least one vehicle body component to thereby maintain the vehicle body components at a predetermined position relative to each other.

McNamara et al. teach does not teach a robot associated with each tool arm. Furthermore, McNamara et al. teach using a pin **46** rather than a clamp to clamp the tool arm to the docking station.

Hirano et al. teach a robot **106** for grasping a vehicle holding transfer bed **110** and moving the transfer bed to a docking station **60**.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of McNamara et al. with a robot, in light of the teachings of Hirano et al., in order to provide better control of the positioning of the tool arm relative to the docking station.

Crorey et al. teach that it is known to use a clamp **94,106** to clamp a tool arm **28B** in place (see figure 9).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of McNamara et al./Hirano et al. with a clamp, in light of the teachings of Crorey et al., in order to more securely fasten the tool arm to the docking station.

Regarding claims 2 and 16, it is noted that Crorey et al. teach clamps at the ends of robot 106 that selectively detachably connect.

Regarding claim 3, note that McNamara et al. teach a welding gun 100.

Regarding claim 4, note that McNamara et al. teach that various tools could be attached to the tool arm in col. 2, lines 58-65. McNamara et al. also teach that welding guns could be used in the assembly apparatus.

Regarding claim 5, as shown in figure 2 of McNamara et al., at least one tool arm extends into an interior of the vehicle body components.

Regarding claim 15, Crorey et al. teach that the concept of using conveyors is a well known concept. Therefore, it would have been obvious to one of ordinary skill in the art, to have provided conveyors, in order to automatically feed parts into the assembly station.

*Allowable Subject Matter*

7. Claims 6-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Friday.

Art Unit: 3726

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Marc Jimenez  
Acting SPE  
Art Unit 3726

MJ  
1/19/06